National Aeronautics and Space Administration Headquarters

Washington, DC 20546-0001



Reply to Attn of: SMD/Astrophysics Division

MAY 2 9 2008

Dr. Raymond L. Orbach Under Secretary for Science U.S. Department of Energy 1000 Independence Avenue, SW Washington, DC 20585

Dear Dr. Orbach:

The quest to understand the nature of dark energy is a high priority science objective for both the National Aeronautics and Space Administration (NASA) and the Department of Energy (DOE). Precision measurements require a dedicated space-based mission. This proposal for the formulation and implementation of the Joint Dark Energy Mission (JDEM) as a NASA/DOE partnership is the result of discussions between the NASA Science Mission Directorate and the DOE Office of Science. It forms the starting point for ongoing discussions and further definition, leading to a Memorandum of Understanding (MOU).

The fundamental points of agreement are:

- 1. DOE and NASA agree to partner in a JDEM.
- 2. NASA will be the lead agency for JDEM, responsible for the success of the overall space mission.
- 3. JDEM will be a medium-class strategic mission with a competitively selected, PI-led dark energy science investigation with a science payload that includes a wide-field telescope and appropriate focal plane instrumentation. Cost control will be a central tenet of JDEM project management and mission design.
- 4. The selected PI-led science investigation team will perform the dark energy science investigation. The selected team will not provide flight hardware.
- 5. The Government will provide the mission-level components, including launch services and the spacecraft bus, as well as the science payload. DOE and NASA will partner in the fabrication of the instrumentation necessary to execute the dark energy science investigation. Both agencies will contribute to the science operations and data analysis activities.
- 6. The specific responsibilities of each agency will be detailed in an Implementation Agreement that will be established after the competitive selection of the dark energy science investigation that defines the mission architecture.

- 7. DOE and NASA will each contribute funding as necessary to fulfill the particular responsibilities each agency agrees to accept. Each Agency will utilize its normal procurement rules in the construction of its contributions.
- 8. Public release of JDEM data will occur after an appropriate period of time following its acquisition.
- 9. In consultation with DOE, NASA will investigate the possibility for international contributions. As the lead U.S. agency, NASA will be the principal point of contact for the JDEM project in negotiating and executing any international partnerships with foreign space agencies.

I hope you agree with this proposal as the basis for establishing the MOU, and will indicate your agreement through an exchange of letters. Based on this proposal, we will sign a MOU in the near future, and begin the procurement process for the JDEM science investigation before the end of 2008. We are currently working towards a launch date for JDEM in the middle of the next decade.

Sincerely,

Dr. Edward J. Weiler

Associate Administrator for Science Mission Directorate

Edward Weiler

National Aeronautics and Space Administration